

SECTION 4

ROOFING; 3 PLY BUILT-UP

4-01 SCOPE: The work covered by this section of the specifications consists in furnishing all plant, labor, equipment, appliances and materials not furnished by the Government, and in performing all operations in connection with the installation of built-up roofing, complete, in strict accordance with this section of the specifications and the applicable drawings, and subject to the terms and conditions of the contract.

4-02 APPLICABLE SPECIFICATIONS: The following specifications of the issues listed below but referred to thereafter by basic designation only, form a part of this specification:

a. Federal Specifications:

HH-F-185	Felt, Asbestos; Asphalt-Saturated, Uncoated for Flashing, Roofing & Waterproofing
SS-A-666	Asphalt; (for) Built-Up Roofing & Waterproofing
SS-A-701	Asphalt-Primer, (for) Roofing and Waterproofing
SS-C-153	Cement; Bituminous; Plastic

STATINTL

4-03 GENERAL: Asphalt built-up roofing shall be applied to the roof surfaces indicated on the drawings. Metal flashings shall conform to the requirements of section on SHEET METALWORK AND MISCELLANEOUS METAL.

4-04 MATERIALS:

a. Asphalt for hot application shall conform to Federal Specification SS-A-666, type II, Grade 2, Class A, having a softening point of 190 degrees F maximum and 160 degrees F minimum.

b. Asphalt primer shall conform to Federal Specification SS-A-701.

c. Perforated asphalt-saturated asbestos felt shall conform to the requirements of Federal Specification HH-F-185, type I, Class A.

d. Plastic bituminous cement shall conform to Federal Specification SS-C-153. Type I shall be used in conjunction with asphalt-saturated felts.

STATINTL

4-05 PREPARATION OF SURFACES: The construction of any bay or section of roof shall be completed before roofing work is begun. Roofing shall not start until roof surfaces are smooth, firm, dry and free from high spots, depressions and all loose and foreign material, and have been inspected and approved by the Contracting Officer. Vents and other projections through roofs shall be properly flashed and secured in position.

4-06 APPLICATION OF ROOFING:

a. General: Three-ply asphalt built-up roofing shall be installed on the prepared concrete roof decks. Asphalt shall not be heated above 400 degrees F. Felts shall not be cut into varying lengths before laying, but shall be unrolled from the full roll immediately following the asphalt mopping. The felts shall be laid by the shingle method and all surfaces of felt must be fully covered with hot asphalt so that in no case shall felt touch felt. The rolls of felts shall be stacked in properly protected piles until ready for use. The mopping shall in no case be more than 5 feet ahead of the application of felt. Felt shall always be dry when applied. Mopping temperature of asphalt shall be 350 to 375 degrees F. Layers of felt shall be rolled accurately in place, free from wrinkles and buckles, and broomed into the cement using an approved roofing broom. Each layer shall be cemented solidly.

b. Method of Application: The prepared roof surface shall be uniformly coated with asphalt primer, using not less than one gallon per 100 square feet. The primer shall be allowed to dry. When the primer has sufficiently dried, a uniform coating of hot asphalt shall be applied over the primer, using not less than 30 pounds per 100 square feet. Over this coating of asphalt, three layers of 36-inch perforated asphalt-saturated asbestos felt shall be laid, lapping each sheet 24 inches over the preceding sheet. Ends of the sheets shall be lapped not less than 6 inches. When 32-inch felt is used, sheets shall be lapped 22 inches. The full width of the lap of each of these three sheets shall be mopped with hot asphalt, using not less than 20 pounds per 100 square feet. Felts shall be cut off at abutting vertical surfaces. When the laying of the three layers of felt is already completed, the entire surface shall be coated uniformly with hot asphalt, using not less than 60 pounds per 100 square feet.

c. Material Requirement: The roofing shall contain not less than the following quantities of materials per 100 square feet.

Asphalt Primer ----- 7.5 lbs
3 Layers of Perforated Asphalt-
Saturated Asbestos Felt ----- 45 lbs
Asphalt ----- 130 lbs

4-07 ROOF EDGE FLASHING specified in section on SHEET METALWORK AND MISCELLANEOUS METAL shall be installed where indicated on the drawings. The edge flashing shall be installed before the application of the roof coating and shall be cemented to the roofing with asphalt-base plastic cement and bolted. The flashing shall then be covered with hot asphalt coating to the thickness indicated on the drawings.

4-08 ROOF COATING: The finished roof surfaces shall be coated with asphalt base aluminum coating conforming to the requirements [REDACTED] ATINTL [REDACTED] The rate of application shall be in accordance with manufacturer's instruction. A minimum of 30 days under favorable conditions or longer, if necessary, as directed by the Contracting Officer, is to be allowed for drying time of roofing before applying roof coating.

STATINTL